DOCKET NO.: MSFT-2924/306986.01
Application No.: 10/797,238
Office Action Dated: March 8, 2007

PATENT
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PROCEDURE PURSUANT TO
37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (currently amended)   A method for executing a file system statement in the context of a transaction, ~~the file system statement including a call to open an item, one of a call to read from the item and a call to write to the item, and a call to close the item,~~ the method comprising:

      receiving the file system statement <u>comprising a call to open an item, a call to read from the item or to write to the item, and a call to close the item, the file system statement being independent of any database application programming interface requests</u>;

      associating the file system statement with the transaction; and

      in response to receiving the file system statement <u>that is independent of any database application programming interface requests</u>, starting the transaction by acquiring either a read lock or a write lock on a data table row corresponding to the item.

2.   (original)   The method of claim 1, comprising starting the transaction by acquiring one of a read lock and a write lock on a data table row that includes a user defined type corresponding to the item

3.   (original)   The method of claim 1, further comprising associating a second statement with the transaction.

4.   (original)   The method of claim 3, comprising associating the second statement with the transaction, the second statement being another file system statement.

5.   (original)   The method of claim 3, comprising associating the second statement with the transaction, the second statement being a transactional query language statement.

6.   (original)   The method of claim 1, wherein starting the transaction comprises:

      determining whether starting the transaction will result in a conflict;

      if so, then resolving the conflict according to a conflict resolution scheme; and

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if not, then starting the transaction.

7.   (original)   The method of claim 1, wherein acquiring the read lock on the row comprises acquiring a read committed view of the row.

8.   (original)   The method of claim 1, wherein acquiring the write lock on the row comprises acquiring a write lock that will prevent another transaction from accessing the row while the transaction is being processed.

9.   (original)   The method of claim 1, wherein acquiring the write lock on the row comprises acquiring a write lock that will prevent a non-transacted file system statement from accessing the row while the transaction is being processed.

10.   (original)   The method of claim 1, wherein acquiring the write lock on the row comprises acquiring a write lock that will prevent another statement within the transaction from writing to the row.

11.   (original)   The method of claim 1, wherein acquiring the write lock on the row comprises acquiring a write lock that will enable another statement within the transaction to read from the row.

12.   (original)   The method of claim 1, comprising starting the transaction by acquiring one of a read lock and a write lock on a filestream field of the row.

13.   (original)   A computer readable medium having computer-executable instructions for performing the steps recited in claim 1.

14.   (currently amended)   A method for locking and isolation of a file system statement ~~including a call to open an item, a call to read from the item, and a call to close the item~~, the method comprising:

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receiving the file system statement <u>comprising a call to open an item, a call to read from the item, and a call to close the item, the file system statement being independent of any database application programming interface requests</u>;

in response to receiving the file system statement <u>that is independent of any database application programming interface requests</u>, determining if a read lock is available for a row of a data table corresponding to the item;

if not, then failing the open; and

if so, then acquiring the read lock on the row.

15.   (previously presented)The method of claim 14, comprising determining if the read lock is available for a row of a data table that includes a user defined type corresponding to the item.

16.   (original)   The method of claim 14, wherein acquiring the read lock on the row comprises acquiring a read committed view of the row.

17.   (previously presented)The method of claim 14, comprising acquiring the read lock on a filestream field of the row.

18.   (original)   A computer readable medium having computer-executable instructions for performing the steps recited in claim 14.

19.   (currently amended)   A method for locking and isolation of a file system statement ~~including a call to open an item, a call to write to the item, and a call to close the item~~, the method comprising:

receiving the file system statement <u>comprising a call to open an item, a call to write to the item, and a call to close the item, the file system statement being independent of any database application programming interface requests</u>;

in response to receiving the file system statement <u>that is independent of any database application programming interface requests</u>, determining if a write lock is available for a row of a data table corresponding to the item;

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if not, then failing the open; and

if so, then acquiring a write lock on the row.

20.   (previously presented) The method of claim 19, comprising determining if the write lock is available for a row of a data table that includes a user defined type corresponding to the item.

21.   (original)   The method of claim 19, wherein acquiring the write lock on the row comprises acquiring a write lock that will prevent another statement from accessing the row while the statement is being processed.

22.   (previously presented) The method of claim 19, comprising starting the transaction by acquiring the write lock on a filestream field of the row.

23.   (original)   A computer readable medium having computer-executable instructions for performing the steps recited in claim 19.

24.   (currently amended)   A system for executing a file system statement ~~in the context of a transaction, the file system statement including a call to open an item, one of a call to read from the item and a call to write to the item, and a call to close the item~~, the system comprising:

    a relational data engine comprising a data table having a row corresponding to the item;

    a storage platform built on the relational data engine, the storage platform comprising means for receiving the file system statement, means for associating the file system statement with the transaction, and means for starting the transaction in response to receiving the file system statement by acquiring either a read lock or a write lock on the row<u>, the file system statement comprising a call to open an item, a call to read from the item or to write to the item, and a call to close the item, the file system statement being independent of any database application programming interface requests</u>.

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25.   (original)   The system of claim 24, wherein the row corresponding to the item includes a user defined type corresponding to the item.

26.   (original)   The system of claim 24, wherein the storage platform further comprises means for associating a second statement with the transaction.

27.   (original)   The system of claim 26, wherein the second statement is another file system statement.

28.   (original)   The system of claim 26, wherein the second statement is a transactional query language statement.

29.   (original)   The system of claim 24, wherein the means for starting the transaction comprises means for performing the following steps:

      determining whether starting the transaction will result in a conflict;

      if so, then resolving the conflict according to a conflict resolution scheme; and

      if not, then starting the transaction.

30.   (original)   The system of claim 24, wherein the read lock provides a read committed view of the row.

31.   (original)   The system of claim 24, wherein the write lock prevents another transaction from accessing the row while the transaction is being processed.

32.   (original)   The system of claim 24, wherein the write lock prevents a non-transacted file system statement from accessing the row while the transaction is being processed.

33.   (original)   The system of claim 24, wherein the write lock prevents another statement within the transaction from writing to the row.

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34. (original) The system of claim 24, wherein the write lock enables another statement within the transaction to read from the row.

35. (original) The system of claim 24, wherein the row comprises a filestream field.